

HORI et al. -- Appln. No. 09/867,418
Client/Matter: 061063-0281359

REMARKS

Claims 1-23 are pending. By this Amendment, claim 1 is amended and claims 21-23 are added.

Applicants appreciate the courtesies extended by Examiner Alexander to Applicants' representative during the personal interview conducted January 12, 2005. Points discussed during the interview are incorporated into the remarks below and constitutes Applicants' record of the substance of the interview.

Entry of this Amendment is proper under 37 C.F.R. §1.116 as the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not require any further consideration and/or search as the amendments merely amplify issues previously discussed throughout prosecution; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented as they respond to points discussed during the personal interview.

Claims 1-7, 17, 18 and 20 were rejected under 35 U.S.C. § 102(e) over Nakagawa et al. (U.S. Patent 6,429,035). The rejection is respectfully traversed.

Claim 1 recites an evaluation method for polycrystalline silicon which is used as a material for pulling single crystal silicon, the method including immersing a predetermined amount of polycrystalline silicon in a predetermined amount of an agent contained in a vessel, which agent is capable of dissolving polycrystalline silicon, and placing a measuring device in the agent having the polycrystalline silicon dissolved therein to count the number of foreign particles of a predetermined size dispersed in the agent so as to predict a free ratio of a single crystal silicon which is to be pulled.

As Applicants have previously and consistently argued there is no disclosure or suggestion by Nakagawa et al. of placing a measuring device in the agent having the polycrystalline silicon dissolved therein, as recited in claim 1. In response to Applicants' arguments, Examiner Alexander has stated in the Office Action that Nakagawa et al. disclose in column 4, lines 40+, melting polycrystalline silicon and subsequent analysis by secondary ion mass spectrometry to determine the impurities in the silicon, and in particular that Nakagawa et al. teach in column 4, lines 43+, melting indium and then melting the polycrystalline silicon into the liquid indium to form a saturated solution of polycrystalline

HORI et al. -- Appln. No. 09/867,418
Client/Matter: 061063-0281359

silicon. Examiner Alexander also stated that the indium has been read on the claimed agent having polycrystalline silicon dissolved therein.

During the interview, Applicants' representative argued that the four-probe measurement of the silicon crystal by Nakagawa et al. does not anticipate Applicants' placing of a measuring device in an agent having the polycrystalline silicon dissolved therein, as recited in claim 1. As discussed during the interview, the four-probe method disclosed by Nakagawa et al. does not involve the placement of a probe in an agent having polycrystalline silicon dissolved therein to count the number of foreign particles. The four-probe method disclosed by Nakagawa et al. merely measures specific resistance of a silicon crystal which has been epitaxially grown on a substrate. See column 4, lines 53-55. Examiner Alexander indicated that as the four-probe method of Nakagawa et al. determines the specific resistance of the crystal which is grown from the melt, such a disclosure is deemed to read on the claimed measuring device placed in the agent having the polycrystalline silicon dissolved therein.

As discussed during the interview, claim 1 recites that the number of selected foreign particles counted in the agent having the polycrystalline silicon dissolved are of a predetermined size so as to predict a free ratio of single crystal silicon which is to be pulled. Support for this feature may be found, for example, on page 6, line 19-page 7, line 3. It is respectfully submitted that as agreed during the interview, Nakagawa et al. are also silent as to this feature and thus does not present a *prima facie* case of anticipation.

Claims 2-20 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 1 and for the additional features recited therein. In addition, Padovani et al., Okada et al. and JP '230 all fail to cure the deficiencies of Nakagawa et al. discussed above with respect to claim 1, and even assuming it would have been obvious to combine the references, such a combination would not have resulted in the claimed invention.

New claims 21-23 recite additional features of the invention and are allowable for the reasons discussed above with respect to claim 1 and for the additional features recited therein. Support for claims 21-23 may be found, for example, on page 3, lines 13-18; page 3, lines 22-25; and page 5, lines 12-15.

Reconsideration and withdrawal of the rejections are respectfully requested

HORI et al. -- Appln. No. 09/867,418
Client/Matter: 061063-0281359

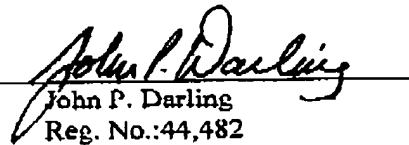
In view of the above remarks, Applicants respectfully submit that all of the claims are allowable and that the entire application is in condition for allowance.

Should the examiner believe that anything further is desirable to place the application in better condition for allowance, the examiner is invited to contact the undersigned at the telephone number listed.

Respectfully submitted,

PILLSBURY WINTHROP LLP

By: _____


John P. Darling
Reg. No.: 44,482

Tel. No.: (703) 905-2045

January 18, 2005

P.O. Box 10500
McLean, VA 22102
Phone: (703) 905-2000
Fax: (703) 905-2500